Amendments to the Claims:

1. (Currently amended) A temperature-sensitive state-changing hydrogel composition, comprising:

~~1-10~~ 2 wt % of locust bean gum as a branched gelation polymer~~, the branched gelation polymer being at least one water soluble polysaccharide polymer selected from the group consisting of galactomannan, glucomannan, guar gum, locust bean gum and pluronic~~;

~~0.5-5~~ 0.6 wt % of carrageenan as an electrolyte gelation polymer~~, the electrolyte gelation polymer being at least one polysaccharide electrolyte polymer selected from the group consisting of agar, algin, carrageenan, xanthan and gelan~~;

~~0.5-5~~ 2.87 wt % of ~~skin communication enhancer, the skin communication enhancer being~~ at least one ~~polysaccharide~~ selected from the group consisting of chitosan ~~derivatives, proteoglycans, elastin,~~ collagen~~, and hyaluronic acid, or protein~~ and aloe extract;

~~1-10 wt % of natural biomaterial, the natural biomaterial being a vegetable, animal, or mineral natural extract extracted from aloe, green tea, ginseng, wood vinegar, pine needles, ginko leaves, propolis, mulberry leaves, or silkworms;~~

~~3-30~~ 20 wt % of ~~polyhydric alcohol, the polyhydric alcohol being propylene glycol or~~ glycerine ~~in a form of a water soluble liquid~~;

~~1-10~~ 0.46 wt % of at least one functional additive, the functional additive being an additive capable of providing stability or beauty functionality to the hydrogel~~,~~ selected from the group consisting of ~~and is~~ methylparaben, propylparaben, ~~kojic acid,~~ imidazolidinylurea~~,~~ and Twin 80 ~~or retinol~~; and

~~30-93 wt %~~ remainder of water based on a total weight of the composition,

wherein, the hydrogel is transformed into a fluid state at 30-50°C.

Claims 2-7 (Canceled).

8. (Currently amended) A method of producing a hydrogel composition, comprising:

Mixing 2 ~~1-10~~ wt % of ~~a branched gelation polymer selected from the group consisting of galactomannan, glucomannan, guar gum,~~ locust bean gum as a branched gelation polymer, 0.6 ~~and pluronic, 0.5-5~~ wt % of carrageenan as an electrolyte gelation polymer, 20 wt % of glycerine and 0.46 ~~selected from the group consisting of agar, algin carrageenan, xanthan and gelan, 1-10~~ wt % of ~~a~~ at least one functional additive, the functional additive being an additive capable of providing stability or beauty functionality to

the hydrogel selected from the group consisting of methylparaben, propylparaben, ~~kojic acid,~~ imidazolidinylurea~~,~~ and Twin 80 ~~and retinol, and 3-30 wt % of a polyhydric alcohol~~, with each other;

adding remainder ~~30-93 wt %~~ of water to the mixture at room temperature;

heating the resulting mixed solution to 45-95°C to produce a gel solution;

adding 2.87 ~~1-10~~ wt % of at least one selected from the group consisting of ~~natural biomaterial extracted from aloe, green tea, ginseng, wood vinegar, pine needles, ginko leaves, propolis, mulberry leaves, or silkworms to the gel solution;~~

~~adding 0.5-5 wt % of a skin-communication enhancer selected from the group consisting of~~ chitosan, ~~chitosan derivatives, proteoglycans, elastin,~~ collagen~~,~~ and aloe extract ~~hyaluronic acid~~ to the gel solution while maintaining the gel solution at 45-95°C; and

cooling the resulting gel solution to room temperature, wherein the hydrogel composition has the ability to transform to a fluid state at a temperature between 30-50°C.